

THE ROHWER SAWFLY TYPES (HYMENOPTERA: SYMPHYTA) IN THE UNIVERSITY OF NEBRASKA STATE MUSEUM

DAVID R. SMITH

Systematic Entomology Laboratory, IIBIII, Agricultural Research Service,
USDA, c/o National Museum Natural History, Washington, D.C. 20560.

Abstract.—Twenty-nine species of Symphyta were described by Rohwer in 1908 and 1909 from the University of Nebraska insect collection. Primary types of most of these species are now in the University of Nebraska State Museum, Lincoln, with a few at the National Museum of Natural History, Smithsonian Institution, Washington, D.C. Lectotypes are designated for five species. Data from the type-specimens, location of types, and current taxonomic placement of the species are presented.

Some of the first sawfly species described by S. A. Rohwer (1908, 1909a, b) were from the collection of the University of Nebraska, Lincoln. Rohwer stated that the types were at the University of Nebraska, or in the case of multiple specimens, that cotypes were at the University of Nebraska and in the author's collection. Types of the twenty-nine species involved were essentially unavailable for study for 30-40 years. They were on loan for most of this time, and their location was not known until they were returned to the Nebraska State Museum in the early 1970's. The Rohwer types were not listed in the "Insect types in the collections of the University of Nebraska State Museum" by Muma (1952).

In 1981, I visited the University of Nebraska State Museum and was able to examine the Rohwer type material. Here I document the types, choose lectotypes for five species, and give notes on their placement.

All specimens regarded as types or cotypes are in the University of Nebraska State Museum (NSM) or in the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM). Specimens from the "author's collection" are now in the USNM. I express appreciation to Brett C. Ratcliffe, Curator of Insects, Systematics Research Collections, University of Nebraska State Museum, Lincoln, for allowing study of the specimens under his care. All types are segregated in separate unit trays in their type collection. I also thank H. R. Wong, Canadian Forestry Service, Northern Forest Research Centre, Edmonton, Alberta, for his opinion on the *Pristiphora*, and D. W. Webb, Illinois Natural History Survey, Champaign, for searching for "missing" specimens.

The following account gives the names as Rohwer proposed them and information from Rohwer's original description; data on the holotype or lectotype; and pertinent comments. Placement of each species as given in the discussions is substantiated by my study of the types. Species are arranged by family and subfamily.

PAMPHILIIDAE

Bactroceros pugnax Rohwer, 1908: 103–104. ♀. “Russell, Costilla Co., Colo., June 25, 1907 (L. Bruner). Type in the entomological collection of the University of Nebraska.”

Type.—Holotype ♀, at NSM, labeled “Russell, Colo., June 25,” “L. Bruner, Collector,” “*Bactroceros pugnax* Roh., type.”

Discussion.—Middlekauff (1964) did not find the type of *pugnax*, but he correctly placed it as a synonym of *Onycholyda multisignata* (Norton). Rohwer (1910) discovered that *B. pugnax* was preoccupied in *Pamphillius* by *P. pugnax* Konow, 1897, and therefore proposed the new name, *Anoplolyda saeva*.

ARGIDAE

Hylotoma grandis Rohwer, 1909a: 14–15. ♀, ♂. “Halsey, Nebr., June, 2 ♂’s, 2 ♀’s. Cotypes in the collection of the University of Nebraska and in the author’s collection.”

Type.—Lectotype ♀ at NSM, labeled “Halsey, Neb.,” “June ’0,” “*Hylotoma grandis* Roh., cotype ♀”; present designation.

Discussion.—A paralectotype male is also at NSM, and female and male paralectotypes are in the USNM. This species was correctly placed as a synonym of *Arge humeralis* (Beauvois) by Smith (1979a).

Hylotoma nigrescens Rohwer, 1909a: 13–14. ♂. “West Point, Nebraska, July 1, 1887, “on plum.” Type in collection of the University of Nebraska.”

Type.—Holotype ♂, at NSM, labeled “West Pt., Neb., 7-87,” “on plum, July 1st.”

Discussion.—The head is missing. It was placed as a synonym of *Arge clavicornis* (Fabricius) by Smith (1979a).

Schizocerus collaris Rohwer, 1909a: 13. ♀. “Antonito, Conejos Co., alt. 7888 ft., Colorado; also Nebraska, “office window,” March 24, 1899, and Harlan, Nebr.”

Type.—Lectotype ♀ designated by Smith (1971), labeled “Antonito, Col., 8-5-99,” “type No. 13236 U.S.N.M.,” “*Schizocerus collaris* Roh., type,” in the USNM.

Discussion.—The specimen from Antonito is labeled “type,” but Rohwer did not designate a type in his description. The specimen from “office window” is labeled “paratype” and is in the USNM. I did not find the specimen(s) from Harlan, Nebraska. This is synonym of *Schizocerella pilicornis* (Holmgren) (Smith, 1971).

Schizocerus lineatus Rohwer, 1909a: 12. ♀. “Geneva, Nebraska. Co-types in the collection of University of Nebraska and in the author’s collection.”

Type.—Lectotype ♀ designated by Smith (1971), labeled “Geneva, Nebr.,” “*Schizocerus lineatus* Roh. (cotype),” in USNM.

Discussion.—Two other females, labeled cotypes, are in the NSM. This is a synonym of *Schizocerella pilicornis* (Holmgren) (Smith, 1971).

Schizocerus nortoni Rohwer, 1909a: 11–12. ♂. “Brady Island, on Platte River, Nebraska. Type in the collection of the University of Nebraska.”

Type.—Holotype ♂ in NSM, labeled “Brady Is., Neb.,” “*Schizocerus nortoni* Roh., type.”

Discussion.—This is a synonym of *Sphacophilus nigriceps* (Konow) (Smith, 1971).

TENTHREDINIDAE

Dolerinae

Dolerus femur-rubrum Rohwer, 1909a: 9–10. ♀. “West Point, Nebr., June, 1888. Type in Nebraska University.”

Type.—Holotype ♀, in NSM, labeled “West Pt., Neb. 6–88,” “*Dolerus femur-rubrum* Roh., type,” “*Dolerus apricus* (Norton) det Ross.”

Discussion.—This is a synonym of *Loderus vestigialis apricus* (Norton) (Ross, 1931; Smith, 1979a).

Dolerus piercei Rohwer, 1909a: 10. ♀. “Lincoln, Nebr., April 19–02, “Immodelle” (W. D. Pierce). Type in the University of Nebraska.”

Type.—Holotype ♀, in NSM, labeled “Lincoln, Nebr.,” “April 19.02,” “Immodelle,” “W. D. Pierce Coll.,” “*Dolerus piercei* Roh., type.”

Discussion.—This is currently a valid species, (Ross, 1931; Smith, 1979a).

Blennocampinae

Lycaota bruneri Rohwer, 1908: 104–105. ♀. “Ute Creek, Costilla Co., Colo., 9000 ft., June 27, 1907 (L. Bruner).”

Type.—Holotype ♀ in NSM, labeled “Ute Creek, Colo., 9000 ft., June 27,” “L. Bruner, Collector,” “*Lycaota bruneri* Roh., type.”

Discussion.—This was correctly placed as a synonym of *Blennogeneris spissipes* (Cresson) (Smith, 1979a).

Nematinae

Amauronematus lincolnensis Rohwer, 1909a: 19–20. ♀. “Lincoln, Nebr., May. Type in the Univ. of Nebraska.”

Type.—Holotype ♀ in NSM, labeled “Lincoln, Neb., May,” “*Amauronematus lincolnensis* Roh., type.”

Discussion.—This is a synonym of *Amauronematus lineatus* (Harrington) (Smith, 1979a).

Amauronematus xanthus Rohwer, 1909a: 18–19. ♀. “Lincoln, Nebr., two ♀’s, one in April. Cotypes in University of Nebraska and in author’s collection.”

Type.—**Lectotype** ♀ in USNM, labeled “Lincoln Neb., April,” “cotype, U.S.N.M. No. 21043,” “*Amauronematus xanthus* Rohwer, cotype”; present designation.

Discussion.—The specimen in the USNM is the only one found that is labeled *xanthus*. In the NSM there is a specimen labeled “Lincoln, Nebr.,” “*Amauronematus albostomus* Roh., cotype” which is probably the other specimen; this is a manuscript name and may be mislabeled, or Rohwer may have intended to describe it as a separate species. The two specimens differ slightly in color, and in the description of *xanthus* Rohwer stated “(in one specimen the basal plates and part of metanotum are black).” This is the color of the “*albostomus*” specimen. *Amauronematus xanthus* currently stands as a valid species (Smith, 1979a).

Camponiscus albostigmus Rohwer, 1908: 105–106. ♀. “Ute Creek, Costilla Co.,

Colo., 9000 ft., July 2, 1907 (L. Bruner). Type in the Entomological Department of the Univ. of Nebraska."

Type.—Not located.

Discussion.—I could not find the specimen but did locate a slide of the female ovipositor labeled "*Camponiscus allostigmus* Roh., Type, Acc. No. 47224, Ute Creek Colo., det. Ross, Ill. Nat. Hist. Sur." This slide, prepared by Ross, is no doubt part of the type-specimen and is in the NSM. This is a valid species, *Fallocampus allostigmus* (Rohwer) (Wong, 1977). It was treated by Smith (1976) in a revision of the genus *Platycampus* where it was previously placed.

Camponiscus smithi Rohwer, 1908: 105. ♀. "Ute Creek, Costilla Co., Colo., 9000 ft., July 1, 1907 (H. S. Smith) . . . Type in the Univ. of Nebraska."

Type.—Not labeled.

Discussion.—I could not find the specimen but did locate a slide of the female ovipositor labeled "*Camponiscus smithii* Rohwer, type, lancet, Ute Creek, Colo., Acc. No. 47226, det. Ross, Ill. Nat. Hist. Sur." This slide, prepared by Ross, is probably part of the type-specimen, and is in the NSM. This is a synonym of *Fallocampus americanus* (Marlatt) (Smith, 1976).

Pachynematus nigriritibialis Rohwer, 1909a: 17. ♀. "Two ♀'s, West Point, Nebr., June; 1 ♀, Brownville, Nebr., June 5. Cotypes in University of Nebraska and in author's collection."

Type.—**Lectotype** ♀ in NSM, labeled "West Pt., Neb.," "June '0," "*Pachynematus nigriritibialis* Roh., cotype"; present designation.

Discussion.—The female from Brownville is in the NSM and the other female from West Point is in the USNM; both are paralectotypes. This is a valid species of *Pachynematus* (Smith, 1979a).

Pachynematus robustiformis Rohwer, 1908: 108–109. ♀. "Sierra Blanca, Costilla Co., Colo., 10,000–11,500 ft., June 22, 1907 (L. Bruner); also Ute Creek, Costilla Co., Colo., 9000 ft., July 24, 1907 (H. S. Smith)."

Type.—**Lectotype** ♀ in NSM, labeled "Ute Creek, Colo., 9000 ft., July 24," "H. S. Smith, Collector," "*Pachynematus robustiformis* Roh. (paratype)"; present designation.

Discussion.—The female from Sierra Blanca is in the USNM and is a paralectotype; it is labeled "type" on the determination label. Although Rohwer labeled the specimens "type" and "paratype," he did not designate a type in the description. This species was correctly placed in *Pachynematus* (Smith, 1979a). It is in the *vagus* group and is close to *P. corniger* (Norton), but the status of *robustiformis* will have to await a revision of the group.

Pachynematus vernalis Rohwer, 1909a: 18. ♀. "One ♀ labelled as follows: "Sawfly on Willow, Oct. 5, '89./ Feb. 19, '90." Probably from Lincoln, Nebr., and raised from a larva on the Willow. Type in the University of Nebraska."

Type.—Holotype ♀ in NSM, labeled "Sawfly on willow, Oct. 5, '89/Feb. 19, '90," "Sl. No. 46908, saw," "*Pachynematus vernalis* Rohwer, type."

Discussion.—The ovipositor has been mounted on a slide with the same accession number as on the specimen label. It is a synonym of *Nematus vancouverensis* (Marlatt) (Smith, 1979a).

Pontania utensis Rohwer, 1908: 107. ♀. "Ute Creek, Costilla Co., Colo., 9000 ft. Two ♀♀ June 22, 1907 (R. W. Dawson), one ♀ July 1, 1907 (R. W. Dawson), one ♀ June 22, 1907 (L. Bruner). Cotypes in collection of Univ. of Nebraska and in the author's own collection."

Type.—**Lectotype** ♀ in NSM labeled "Ute Creek, Colo., 9000 ft., June 22," "R. W. Dawson, collector," "*Pontania utensis* Roh. (cotype)"; present designation.

Discussion.—The remaining three specimens are paralectotypes. The specimen collected June 22 by Dawson is in the NSM, the ones collected July 1 and "June 22" by Bruner are in the USNM. The specimen collected by Bruner is labeled "June 27"; June 22 may be a misprint. This species is currently *Phyllocolpa utensis* (Rohwer) (Smith, 1979a).

Pristiphora dawsoni Rohwer, 1908: 109. ♀. "Ute Creek, Costilla Co., Colo., 9000 ft., July 4, 1907 (R. W. Dawson) . . . Type in the collection of University of Nebraska."

Type.—**Holotype** ♀ in NSM, labeled "Ute Creek, Colo., 9000 ft., July 4," "R. W. Dawson, collector," "*Pristiphora dawsoni* Roh., type."

Discussion.—This is a synonym of *Pristiphora coactula* (Ruthe) (H. R. Wong, personal communication; Smith, 1979a).

Pristiphora maura Rohwer, 1908: 109–110. ♂. "Ute Creek, Costilla Co., Colo., 9000 ft., July 4, 1907 (R. W. Dawson). Type in collection of the University of Nebraska."

Type.—**Holotype** ♂ in NSM, labeled "Ute Creek, Colo., 9000 ft., July 4," "R. W. Dawson, collector."

Discussion.—This is a valid species in *Pristiphora* (H. R. Wong, personal communication; Smith, 1979a). The genitalia have been extracted and are in a glycerin vial on the pin below the specimen; the valves are missing and may have been mounted, but I did not locate a slide.

Pristiphore zella Rohwer, 1909a: 20. ♀. "One ♀ from Nebraska, probably from Lincoln, May 5, '03. Type in collection of Univ. of Nebraska."

Type.—**Holotype** ♀ in NSM, labeled "May 5 '03," "*Pristiphora zella* Roh., type."

Discussion.—This is probably a valid species of *Pristiphora* (H. R. Wong, personal communication), although listed as a synonym of *P. pallidiventris* (Fallén) by Smith (1979a). The ovipositor has been dissected from the type, but I did not locate a slide.

Pteronus costillensis Rohwer, 1908: 106–107. ♀. "Sierra Blanca, Costilla Co., Colo., 10,000–11,500 ft., June 22, 1907 (L. Bruner). Type in collection of Nebraska University."

Type.—**Holotype** ♀ in NSM, labeled "Sierra Blanca, Colo., June 22, 10–11,500 ft.," "L. Bruner, collector," "Sl. No. 46907 saw," "*Pteronus costillensis* Roh., type."

Discussion.—The ovipositor is on a slide labeled with the same accession number as on the specimen label. It is currently *Nematus costillensis* (Rohwer) in the *obligospilus* group (Smith, 1979a).

Allantinae

Emphytus leucostoma Rohwer, 1908: 110. ♂. "Ute Creek, Costilla Co., Colo., 9000 ft., July 4, 1907 (R. W. Dawson). Type in the entomological collection of the University of Nebraska."

Type.—Holotype ♂ in NSM, labeled "Ute Creek, Colo., 9000 ft., July 4," "R. W. Dawson, collector."

Discussion.—This is a synonym of *Ametastegia aperta* (Norton) (Smith, 1979b). Rohwer (1911) discovered that the name was preoccupied by *Emphytus leucostomus* Costa, 1890, and proposed the new name *Emphytina plesia*.

Eriocampa rotundiformis Rohwer, 1909a: 16–17. ♂. "West Point, Nebr., June. Type in the collection of University of Nebraska."

Type.—Holotype ♂ at NSM, labeled "West Pt., Neb.," "June '0," "Eriocampa nigrisoma Roh., type."

Discussion.—"*Eriocampa nigrisoma*" is a manuscript name; the label data agree with the date in the description and the specimen agrees with the description of *rotundiformis*. I believe that this is the type and that Rohwer changed the name of the species in print but did not change the name on the label. It is a synonym of *Eriocampa juglandis* (Fitch) (Smith, 1979b).

Tenthredininae

Macrophya pulchelliformis Rohwer, 1909a: 15. ♂. "Lincoln, Nebr., May. Type in the collection of the University of Nebraska."

Type.—Holotype ♂ in NSM, labeled "Lincoln, Neb., May."

Discussion.—Gibson (1980) did not see the type, but I can confirm his recognition of it as a valid species in *Macrophya*.

Macrophya sambuci Rohwer, 1909a: 15–16. ♀. "Two ♀'s, Lincoln, Nebr., April 19, 1902, "on elder" (*Sambucus*), (W. D. Pierce); ♀, Nebraska (J. S. H.). Co-types in collection of Univ. of Nebr. and in author's collection."

Type.—Lectotype ♀ in USNM, designated by Gibson (1980), labeled "Lincoln, Nebr.," "April 19.02," "on elder," "W. D. Pierce, coll.," "cotype No. 14268 U.S.N.M.," "*Macrophya sambuci* Roh., cotype," "*Macrophya nebraskensis* (= *sambuci*) Roh., cotype."

Discussion.—The two female paralectotypes are at the NSM. Rohwer (1912) gave this species a new name, *Macrophya nebraskensis*, after discovering that the original name was preoccupied by *Macrophya sambuci* (Latreille), 1805. It is a synonym of *Macrophya pulchelliformis* Rohwer (Gibson, 1980).

Tenthredo ferrugineipes, var. *piki* Rohwer. 1909b: 107–108. ♀. "Pike's Peak, Colorado, alt. 10,000 ft., July 20, 1906 (L. Bruner). Type in the University of Nebraska."

Type.—Holotype ♀ in NSM, labeled "Pike's Peak, Colo., 10,000 ft., July 20, 1906, L. Bruner, Col.," "*Tenthredo ferrugineipes* var. *piki* Roh., type."

Discussion.—This is currently placed as a synonym of *Tenthredo occidentalis* (Cresson) (Smith, 1979a).

Tenthredo relativus Rohwer, 1909b: 108–109. ♀. "West Point, Nebraska, June 21, 1905 (H. S. Smith). Type in the University of Nebraska."

Type.—Holotype ♀ in NSM, labeled “West Pt. Neb.,” “June 21, ’05,” “H. S. Smith, Collector,” “*Tenthredo relativus* Roh., type.”

Discussion.—This is currently considered a valid species in *Tenthredo* (Smith, 1979a).

Tenthredo utensis Rohwer, 1909b: 109–110. ♀. “Ute Creek, Costilla Co., Colorado, alt. 9000 ft., June 22, 1907 (R. W. Dawson). Type in the University of Nebraska.”

Type.—Holotype ♀ at NSM, labeled “Ute Creek, Colo., 9000 ft., June 22,” “R. W. Dawson, Collector,” “*Tenthredo utensis* Roh., ♀ type.”

Discussion.—This is placed as a synonym of *Tenthredo pleuralis* (Cresson) (Smith, 1979a).

Tenthredo zelmirus Rohwer, 1909b: 109. ♂. “Ute Creek, Costilla Co., Colo. alt. 9,000 ft., July 1907 (L. Bruner and R. W. Dawson); Russel, Colo., June 25, 1907 (L. Bruner); and Ft. Garland, Colo., July 12, 1907 (L. Bruner). Type and paratypes in the University of Nebraska, and paratypes in my collection.”

Type.—Holotype ♂ in NSM, labeled “Ute Creek, Colo., 9000 ft., July 4,” “R. W. Dawson, collector,” “*Tenthredo zelmirus* Roh., type.”

Discussion.—Rohwer did not say which specimen was the type, but the above is the only one found labeled “type.” Specimens labeled paratypes are in the NSM (five from Ute Creek, one from Russel) and the USNM (two from Ute Creek). I did not find the specimen(s) from Ft. Garland. This is listed as an unassociated male of *Tenthredo* by Smith (1979a).

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